

## **Chapters 4, 9-12 Review Key**

This review sheet will be much more use to you if you attempt all the questions (or at least a full page of questions) before looking at these answers. These are typical final exam questions so keep this for the midterm and final reviews!

### **Multiple Choice**

- |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 1. a  | 11. d | 23. b | 33. d | 44. a | 55. a | 65. a |
| 2. c  | 12. d | 24. b | 34. b | 45. c | 56. d | 66. b |
| 3. d  | 13. b | 25. c | 35. a | 46. b | 57. b | 67. d |
| 4. a  | 15. b | 26. a | 36. a | 47. b | 58. b | 70. d |
| 5. d  | 17. d | 27. c | 37. b | 48. b | 59. c | 71. c |
| 6. b  | 18. c | 28. b | 38. c | 49. b | 60. d | 72. c |
| 7. b  | 19. c | 29. b | 39. c | 50. c | 61. a | 73. b |
| 8. c  | 20. a | 30. d | 41. c | 51. a | 62. c | 74. a |
| 9. c  | 21. a | 31. c | 42. d | 52. d | 63. d |       |
| 10. d | 22. a | 32. d | 43. c | 53. a | 64. c |       |

### **Open Ended Questions**

14. See notes or text. Be sure to include benioff zone, trench, volcano location, directions of motion, etc.

16. See Geological Formation of BC

- a) isostasy caused roots of colliding volcanic islands to rise up as volcano eroded away
- b) collision caused folding
- c) Juan de Fuca plate subducting beneath North American causes cascade volcanoes
- d) same subduction zone

40. a) coast lines match    b) diverging plates

54. a) A

b) Clue 1: P waves arrive earlier at A

Clue 2: amplitude of waves is greater at A

Clue 3: the difference in P and S wave arrival times is less at A

68. a) This is a non-plunging syncline with straight lines from front to back on map and strike dip on map (strike parallel to lines and dip pointing toward middle). Then end and side should be completed as well. The end will look like a smile with conglomerate on bottom then shale then sandstone. The side will have one line running straight back with conglomerate on the bottom half and shale on top. ENSURE contacts match up!

b) non-plunging syncline

69. a) normal    b) reverse    c) thrust    d) right lateral strike slip